

TABLE I

	CONTROLLER RANGE	CODE VALUE RANGE
ΔR	0 - 100	-50 \rightarrow +50
ΔG	0 - 100	-50 \rightarrow +50
ΔB	0 - 100	-50 \rightarrow +50
ΔL	0 - 100	-50 \rightarrow +50
G	0 - 100	20 \rightarrow 150
C	0 - 100	0 \rightarrow 2

Fig. 2

TABLE II

$$\begin{bmatrix} R' \\ G' \\ B' \end{bmatrix} = \begin{bmatrix} .3086(1-c) + c & .6094(1-c) & .082(1-c) \\ .3086(1-c) & .6094(1-c) + c & .082(1-c) \\ .3086(1-c) & .6094(1-c) & .082(1-c) + c \end{bmatrix} \begin{bmatrix} R \\ G \\ B \end{bmatrix}$$

Fig. 3

TABLE III

$$OUTPUT = \frac{255}{4} \left(\left(1 + \tanh \left[\frac{(INPUT + \Delta L - 128 - G + \Delta R)}{G} \right] \right) + \left(1 + \tanh \left[\frac{(INPUT + \Delta L - 128 + G + \Delta R)}{G} \right] \right) \right)$$

Fig. 4

TABLE IV

$$\left(\frac{255}{4} \right) \left(\left(1 + \tanh \left[\frac{((INPUT - 128) + \beta (INPUT - 128)^3 + \Delta L - G + \Delta R)}{G} \right] \right) + \left(1 + \tanh \left[\frac{((INPUT - 128) + \beta (INPUT - 128)^3 + \Delta L + G + \Delta R)}{G} \right] \right) \right)$$

Fig. 5

Fig. 1

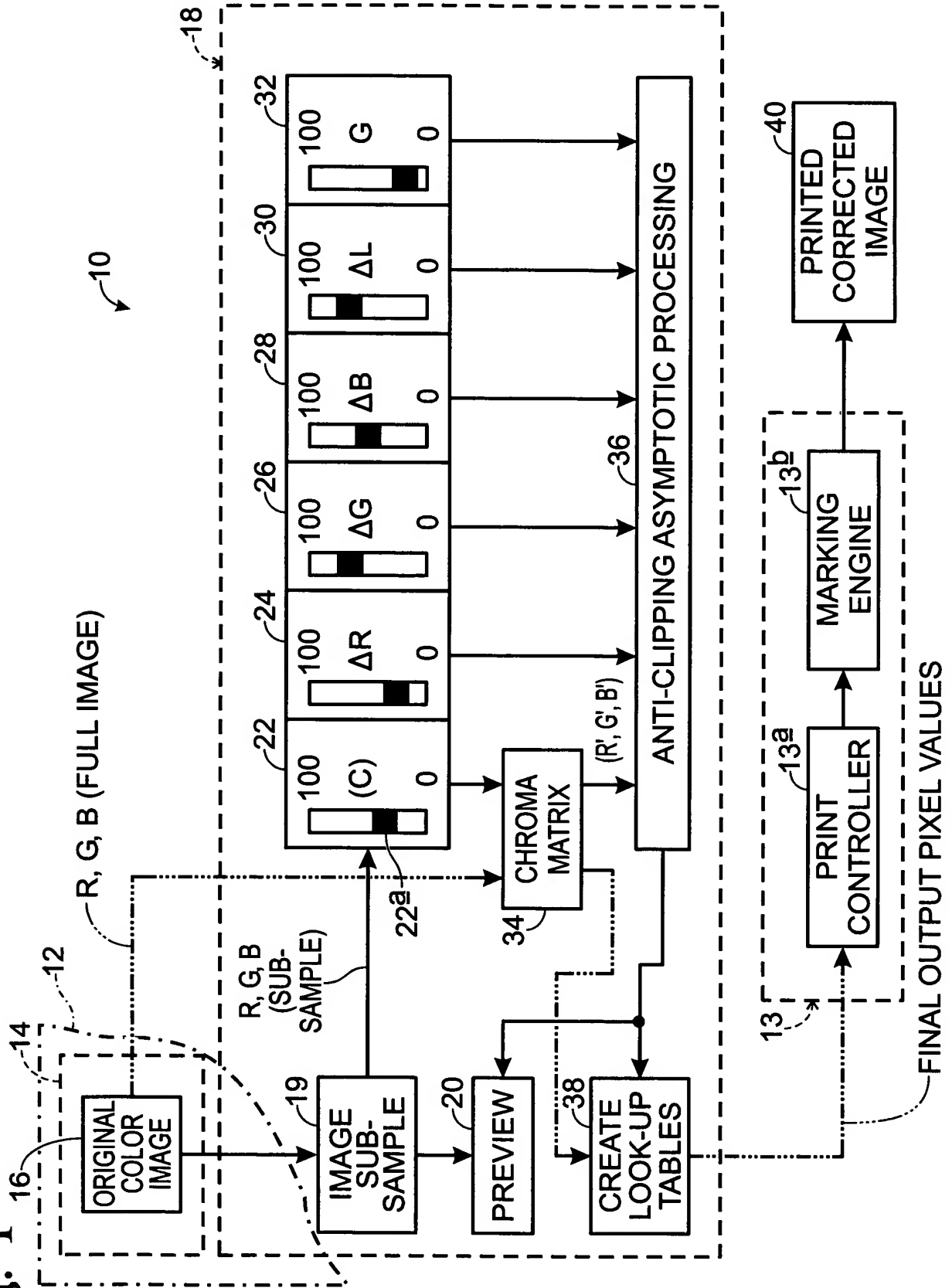


Fig. 2

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TABLE II

$$\begin{pmatrix} R' \\ G' \\ B' \end{pmatrix} = \begin{pmatrix} .3086 (1-C) + C & .6094 (1-C) & .082 (1-C) \\ .3086 (1-C) & .6094 (1-C) + C & .082 (1-C) \\ .3086 (1-C) & .6094 (1-C) & .082 (1-C) + C \end{pmatrix} \begin{pmatrix} R \\ G \\ B \end{pmatrix}$$

Fig. 4

TABLE III

$$\text{OUTPUT} = \frac{255}{4} \left(\frac{(1 + \tanh [(\text{INPUT} + \Delta L - 128 - G + \Delta R)/G]) + (1 + \tanh [(\text{INPUT} + \Delta L - 128 + G + \Delta R)/G])}{2} \right)$$

Fig. 5

TABLE IV

$$\left(\frac{255}{4} \right) \left(\frac{(1 + \tanh [((\text{INPUT} - 128) + \beta(\text{INPUT} - 128)^3 + \Delta L - G + \Delta R)/G]) + (1 + \tanh [((\text{INPUT} - 128) + \beta(\text{INPUT} - 128)^3 + \Delta L + G + \Delta R)/G])}{2} \right)$$